



# **TB Hospitals – Gateway to Integrated Diagnosis, Care and Treatment**

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# History of TB Hospitals in SA

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- NGO run TB hospitals started soon after World War II
- Unique role for many years – emphasis was on nursing care and nurturing
- Many social problems, nutrition important
- Patients stayed for long – often 6+ months
- Most patients were ambulant and responded well to medication and care; death rate was <10%



# TB Hospitals Current Status

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- Review 2000 to investigate the role of TB hospitals in SA keeping in mind cost effectiveness and the focus of the NTCP
- In-patient audit team was established who identified Performance Indicators - data was collected from all the hospitals quarterly
- Some important information came to light
- Often data was looked at in isolation instead of analyzing many indicators in tandem for a reliable conclusion, e.g. death rate, length of stay and sputum conversion



# Current Patient profile

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- HIV epidemic catapulted the TB into an abyss with unknown dimension – already in 1993 WHO declared TB a Global emergency
- In SA TB became *the* Aids -defining disease with a co-infection rate of more than 55%
- In a study done in Gauteng Life Esidimeni TB hospitals the co-infection rate increased from 66% in 1998 to over 80% in 2001.
- Patients were admitted no longer primarily for TB but to manage the opportunistic infections of HIV/Aids and the devastation caused by a compromised immune system
- Death rate escalated to  $\pm 30\%$  with high % within the first 2 weeks following admission



# TB Hospitals - Patient Offering Now

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- Hotel services
- Nursing and GP Care
- Adequate diet (100% RDA) with supplementation, either Vitamins or Food supplements
- Management of a few identified opportunistic infections
  - Candidiasis, Herpes Zoster, other skin manifestations, symptomatic treatment for chronic gastro-enteritis
  - PCP pneumonia, peripheral neuropathies, rarely investigations and treatment for meningitis (e.g. Cryptococcal, Toxoplasmosis)
- Medical care by medical practitioners often palliative



# TB Hospitals Patient Offering Now (cont.)

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- Supplementary health care workers, e.g. physiotherapists, OT's and SW's became more actively involved
- Voluntary Counseling and testing – uptake poor ranging from <10% - 40%
  - Reasons for this is multi-factorial
- Short length of stay – e.g. <60 days  
(Prerequisite by Provincial Departments of Health) Total admission to Life Esidimeni/year  $\pm 7000$  patients (Total # of TB patients  $\pm 300,000$ )



# TB Hospitals – the Weakest Link?

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- Admissions – care is provided for the very sick with co-infections, relieves Provincial Hospitals
- High rate of retreatment patients (>30%)
  - last opportunity to ensure cure before MDR TB sets in, opportunity for education of patient
- ALOS <60: short length of stay more cost-effective
- Effective discharge rate – *the weakest link!*
  - Lack of statistics on treatment outcome and follow-up after discharge
- VCT – wide opportunity for improvement

<b>TB Performance Indicators</b>  <b>Hospital Name:</b>  <b>Number of Approved Beds:</b>	<b>Output</b>			
	<b>Richmond</b>			
	<b>585</b>			
	<b>Quarter 1</b>	<b>Quarter 2</b>	<b>Quarter 3</b>	<b>Quarter 4</b>
<b>PI for the period:</b>	<b>Oct-Jan 2004</b>	<b>Jan-Mar 2005</b>	<b>Apr-Jun 2005</b>	<b>Jul-Sep 2005</b>
<b>Performance Indicator</b>				
Average Length of Stay (in days)	61	59	64	60
Bed Occupancy (percentage)	58%	55%	49%	58%
Smear Conversion Rate - new patients (percentage)	88%	82%	76%	75%
Smear Conversion Rate - re-treatment patients (percentage)	84%	68%	79%	64%
Percentage of patients admitted who are sputum negative	28%	47%	40%	42%
Bacterial coverage (percentage)	65%	94%	87%	89%
Percentage of re-treatment patients	34%	53%	52%	51%
Death Rate (percentage)	30%	38%	34%	32%
Death Rate within 2 weeks of admission (percentage)	10%	17%	16%	12%
Effective Discharge Rate (percentage)	86%	91%	98%	95%
<b>HIV PROGRAM</b>				
Total number of admissions	621	403	445	483
Number of patients whose HIV status is unknown	292	207	221	154
Number of patients offered VCT counselling	214	252	389	308
Number of patients accepting testing	63	81	133	154
Percentage of patients who tested positive	33	42	31	100





# TB Hospitals Gateway for improved Care and Treatment

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- VCT: Counseling
  - Dependent on skills of counsellor, time, social and other factors
  - Wide range – 3% to 38% uptake
  - Richmond: 29% ➡ 32% ➡ 34% ➡ 50%
  - Must become part of work-up on admission (opt-out approach)
- More aggressive management of opportunistic infections
  - Will bring some relief to “challenged” staff at provincial hospitals
  - Step-up care needed; nursing skills mix must be reviewed
- Outcome verification – imperative to eradicate *weakest link!*
  - IT technology – e.g. cell phone technology
  - Focused DOTS links with Community workers and hospitals by employing dedicated staff to manage the link – must be included in the SLA
- TB Hospitals must become part of integrated TB/HIV care
  - Counseling and testing
  - Education and nutrition
  - ARV roll-out
  - Integration into Community Health Clinics